Release A CDR RID Report

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Section Hardware **Page** **Figure** **Table**

Category Name Hardware **Actionee** ECS
Sub Category
Subject Not enough use of cross-strapping to save cost

Description of Problem or Suggestion:

There are additional opportunities for cost reductions through alternative cross-strapping configurations. Instead of having two DIPHW Sparcs back each other up and two identical DIPRWH Document Server Sparcs back each other up, it would seem that you could have just one Sparc in each HWCI with an additional one available to backup whichever one went down (see GSFC DAAC Hardware Configuration for example). If the Document Server hardware choice is changed to a Challenge L due to the poor performance of NCSA httpd on Solaris, you could do the same cross-strapping between the APC server and the Document Server.

Originator's Recommendation

Investigate alternative cross-strapping configurations across HWCIs and even subsystems, such as the above case.

GSFC Response by: **GSFC Response Date**

HAIS Response by: Mark Huber **HAIS Schedule** 9/20/95
HAIS R. E. Mark Huber **HAIS Response Date** 12/5/95

The configuration proposed by the RID author is to use cross strap Sparcs in the DSS in order to save equipment costs. While this idea has merit, there are circumstances that prompted us to configure the system as we did. All the machines in the Release A time frame have been cross strapped with a cold fallback machine. This was deemed prudent since many of our vendors could not assure us that operational cross strapped configurations (that would result after a failure) would be possible using the COTs software and configurations we specified. Undesirable results may arise if the cold backup machine is powered up as a replacement for a failed server at the same time as the active server machine is connected to shared peripherals. The functionality of the COTs software running in this configuration is also an unknown. These configurations must be tested before the decision to use active cross strapped machines can be made.

With the much larger Release B hardware buy coming up later in the program, we recommend procuring the hardware as proposed for Release A. Should cross-strapping prove feasible after testing with the COTs in the EDF, the extra machines deployed at GSFC and LaRC from GSFC will be used at those sites for other purposes or at EDC at Release B.

Status **Closed** **Date Closed** **1/25/96** **Sponsor** **Marinelli**

****** **Attachment if any** ******
